

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) In the processing of semiconductor devices, a system for delivering gas at a predetermined rate of flow, comprising: a flow controller having a diaphragm forming upstream and downstream chambers; a regulator for delivering gas to the upstream chamber of the flow controller at a substantially constant pressure, said controller having an outlet from the downstream chamber which is opened and closed by the diaphragm; an urging means for urging the diaphragm toward its closed position; and a valve for selectively adjusting the spring force to achieve the predetermined rate of flow without having to use a gas flow measurement device to monitor the flow rate, further comprising at least one fin flow sensor, which monitors the rate of flow.

2. (original) The system as recited in claim 1, wherein said controller and said regulator are contained in a single housing.

3. (original) The system as recited in claim 1, additionally comprising a heating element for maintaining the gas in said system at a substantially constant temperature.

4. (original) The system as recited in claim 1, wherein the valve includes a stepper motor.

5. (original) The system as recited in claim 1, wherein the urging means is a spring.

6. (currently amended) In the processing of semiconductor devices, a method for delivering gas at a predetermined rate of flow, comprising: regulating the delivery of gas to an

upstream chamber of a flow controller at a substantially constant pressure, said controller having an outlet from a downstream chamber which is opened and closed by a diaphragm; and selectively adjusting spring force to achieve the predetermined rate of flow without having to use a gas flow measurement device to monitor the flow rate, further comprising at least one flow sensor, which monitors the rate of flow.

7. (original) The method as recited in claim 6, wherein said controller is contained in a single housing with a pressure regulator.

8. (original) The method as recited in claim 6, wherein the gas in said system is maintained at a substantially constant temperature.